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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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21171 7590 12/11/2007 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005				
EXAMINER BUTLER, DENNIS				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.	Applicant(s)	
10/679,293	OH ET AL.	
Examiner	Art Unit	
Dennis M. Butler	2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-7, 13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-7, 13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

1. This action is in response to the amendment filed on October 16, 2007. Claims 1, 3-7, 13 and 15 are pending.

DETAILED ACTION

2. The text of those sections of Title 35, US Code not included in this action can be found in a prior Office Action.
3. The rejection of claims 3-6 under 35 U.S.C. 112, second paragraph, is withdrawn in view of applicant's amendments.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1, 3-7, 13 and 15 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No.

5,961,647 in view of Chaiken et al., U. S. Patent 6,223,283. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to substantially the same invention including a computer that outputs a signal via a signal cable to a monitor, the signal indicating whether the computer is powered on or off and switching circuitry in the monitor powering the monitor on and off according to the signal. The elements relating to the computer that outputs a signal via a signal cable to a monitor, the signal indicating whether the computer is powered on or off and switching circuitry in the monitor powering the monitor on and off according to the signal in the claims of the present application are related as genus to the species of invention recited in the patented claims and fully encompass the patented claims. The dependent claims of the present application substantially correspond to the elements recited in the patented claims. Thus, the generic invention and/or claim elements are "anticipated" by the species of the patented invention. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (holding that an earlier species disclosure in the prior art defeats any generic claim). This courts predecessor has held that, without a terminal disclaimer, the species claims preclude issuance of the generic application. *In re Van Ornum*, 686 F.2d 937, 944, 214 USPQ 761, 767 (CCPA 1982); *Schneller*, 397 F.2d at 354. Accordingly, absent a terminal disclaimed, the claims are/were properly rejected under the doctrine of obviousness-type double patenting. *In re Goodman* CAFC 29 USPQ 2d 2010 (12/3/1993). The claims differ from Kim et al in that Kim et al fails to explicitly teach the monitor including a memory storing monitor information wherein the information is provided to the computer whether the monitor is

powered on or off as claimed. However, locating the monitor information in the ROM of the MICOM would have been obvious to one of ordinary skill in the art for the same reasons as described below in connection to the art rejection and the examiner's response to applicant's arguments.

Claim Rejections - 35 USC § 103

6. Claims 1, 3-7, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al., U. S. Patent 5,961,647 in view of Chaiken et al., U. S. Patent 6,223,283.

Per claim 1:

A) Kim et al teach the following claimed items:

1. a computer (computer 100) selectively outputting a predetermined signal indicating whether the computer is powered on or off with the signal output from 1st Power Supply 120 to switching circuit 250 in figures 4 and 5, at column 8, lines 39-44 and 51-54 and at column 9, lines 17-25;
2. a monitor (display 200) receiving the predetermined signal and powering on and off according to the predetermined signal with figure 5 and at column 8, lines 23-44 and 51-54;
3. a video card processing and transmitting a video signal to the monitor with video card 130, associated connectors and cable 300 of figure 5;
4. outputting the predetermined signal from a predetermined pin of the video card with the power supply control signal pin in cable 300 and the corresponding

connector pin in the video card connector, with figure 5, at column 9, lines 17-30 and at column 5, lines 36-40;

5. transmitting the predetermined signal to the monitor independent of whether the monitor is powered on or off at column 8, lines 39-44 and 51-54 and at column 10, lines 53-65.

B) The claims differ from Kim et al in that Kim et al fails to explicitly teach the monitor including a memory storing monitor information wherein the information is provided to the computer whether the monitor is powered on or off as claimed.

C) However, Kim describes providing a 5 volt power signal from the computer to the MICOM and switching circuit 250 with figures 4 and 5. Kim discloses supplying the 5 volt predetermined signal to the MICOM microcomputer when the monitor is powered off at column 10, lines 53-65. Therefore, Kim discloses providing a separate power source to the switching circuit components in the monitor making the switching circuit power independent of the monitor power supply. Chaiken teaches that it is known to provide a monitor with a memory storing monitor information and that it is conventional for the BIOS to read/download the monitor information in a monitors ROM during initialization with figure 2 and at column 1, lines 45-59. In addition, Kim acknowledges that monitors consume an undue amount of power and acknowledges that it is known to include display power management systems (DPMS) in monitors at column 1, lines 45-55 and column 7, lines 7-16. Kim further discloses improving the conventional DPMS by combining a DPMS with the MICOM and switching circuit

250 of figures 4 and 5 in order to further reduce overall power consumption of the monitor to below 1 watt at column 10, lines 53-65. This effectively makes the MICOM microcomputer part of the DPMS. As described above, Kim maintains the 5 volt power to MICOM microcomputer while the monitor is powered off thereby further reducing the power consumption of the monitor when in the power save mode because only the MICOM switching circuit remains powered. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a monitor with a memory storing monitor information, as taught by Chaiken, in order to provide the computer and BIOS with monitor information for initializing and configuring the computer. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the memory with the MICOM switching circuit components and power the memory from the 5 volt power signal of Kim in order to provide power to the memory whether the monitor is powered on or off because this would allow the monitor to remain off during computer initialization and configuration thereby reducing the power consumed by the monitor. Furthermore, it is well known in the art that microcomputers such as MICOM in display 200 typically include read only memory and it would have been obvious to one of ordinary skill in the art to use the MICOMs ROM for storing Chaiken's EDID file. It would have been obvious for one of ordinary skill in the art to combine Kim and Chaiken because of Chaiken's description that it is well known that monitors include a ROM for storing EDID files having monitor information

and that it is conventional for the BIOS to read/download the EDID file in a monitors ROM during initialization at column 1, lines 45-59. Therefore, Chaiken discloses that one of ordinary skill in the art would have known that monitors include a ROM for storing EDID files having monitor information and that it is conventional for the BIOS to read/download the EDID file in a monitors ROM during initialization. It would have been obvious for one of ordinary skill in the art to locate/store the EDID file in the ROM of the monitors MICOM microcomputer in order to take advantage of the microcomputers independent power source and display power management functionality.

Per claims 3 and 4:

A) Kim et al teach the following claimed items:

1. a computer (computer 100) selectively outputting a predetermined signal indicating whether the computer is powered on or off with the signal output from 1st Power Supply 120 to switching circuit 250 in figures 4 and 5, at column 8, lines 39-44 and 51-54 and at column 9, lines 17-25;
2. a monitor (display 200) receiving the predetermined signal and powering on and off according to the predetermined signal with figure 5 and at column 8, lines 23-44 and 51-54;
3. a video card processing and transmitting a video signal to the monitor with video card 130, associated connectors and cable 300 of figure 5;
4. outputting the predetermined signal from a predetermined pin of the video card with the power supply control signal pin in cable 300 and the corresponding

connector pin in the video card connector, with figure 5, at column 9, lines 17-30 and at column 5, lines 36-40;

5. transmitting the predetermined signal to the monitor independent of whether the monitor is powered on or off at column 8, lines 39-44 and 51-54 and at column 10, lines 53-65;

6. a control unit comparing a reference level (the threshold voltage level of switching transistor Q1) with a level of the predetermined signal, detecting a state of the computer based on the comparison and outputting a monitor power control signal with MICOM and switching circuit 250 of figure 4 and at column 8, line 23 – column 9, line 16;

7. a power supply unit that is controlled by the control unit to supply or stop the supply of power to the monitor with 2nd Power Supply 240 of figure 4 and at column 8, line 51 – column 9, line 16.

B) The claims differ from Kim et al in that Kim et al fails to explicitly teach the monitor including a memory storing monitor information wherein the information is provided to the computer whether the monitor is powered on or off as claimed.

C) However, Kim describes providing a 5 volt power signal from the computer to the MICOM and switching circuit 250 with figures 4 and 5. Kim discloses supplying the 5 volt predetermined signal to the MICOM microcomputer when the monitor is powered off at column 10, lines 53-65. Therefore, Kim discloses providing a separate power source to the switching circuit components in the monitor making the switching circuit power independent of the monitor power

supply. Chaiken teaches that it is known to provide a monitor with a memory storing monitor information and that it is conventional for the BIOS to read/download the monitor information in a monitors ROM during initialization with figure 2 and at column 1, lines 45-59. In addition, Kim acknowledges that monitors consume an undue amount of power and acknowledges that it is known to include display power management systems (DPMS) in monitors at column 1, lines 45-55 and column 7, lines 7-16. Kim further discloses improving the conventional DPMS by combining a DPMS with the MICOM and switching circuit 250 of figures 4 and 5 in order to further reduce overall power consumption of the monitor to below 1 watt at column 10, lines 53-65. This effectively makes the MICOM microcomputer part of the DPMS. As described above, Kim maintains the 5 volt power to MICOM microcomputer while the monitor is powered off thereby further reducing the power consumption of the monitor when in the power save mode because only the MICOM switching circuit remains powered. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a monitor with a memory storing monitor information, as taught by Chaiken, in order to provide the computer and BIOS with monitor information for initializing and configuring the computer. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the memory with the MICOM switching circuit components and power the memory from the 5 volt power signal of Kim in order to provide power to the memory whether the monitor is powered on or off

because this would allow the monitor to remain off during computer initialization and configuration thereby reducing the power consumed by the monitor.

Furthermore, it is well known in the art that microcomputers such as MICOM in display 200 typically include read only memory and it would have been obvious to one of ordinary skill in the art to use the MICOMs ROM for storing Chaiken's EDID file. It would have been obvious for one of ordinary skill in the art to combine Kim and Chaiken because of Chaiken's description that it is well known that monitors include a ROM for storing EDID files having monitor information and that it is conventional for the BIOS to read/download the EDID file in a monitors ROM during initialization at column 1, lines 45-59. Therefore, Chaiken discloses that one of ordinary skill in the art would have known that monitors include a ROM for storing EDID files having monitor information and that it is conventional for the BIOS to read/download the EDID file in a monitors ROM during initialization. It would have been obvious for one of ordinary skill in the art to locate/store the EDID file in the ROM of the monitors MICOM microcomputer in order to take advantage of the microcomputers independent power source and display power management functionality.

Per claims 5 and 6:

Kim describes detecting the level of the predetermined signal, supplying power to the monitor when the level is higher than a reference level and cutting off power when the level is lower than the reference level with the threshold voltage level of switching transistor Q1 of figure 4 and at column 8, line 58 – column 9, line 16.

Kim describes that the predetermined signal is 5V for powering on and 0V for powering off at column 10, lines 18-53.

Per claim 7:

Kim describes transmitting the predetermined signal to the monitor via a serial cable with the serial cable running from 1st Power Supply 120 to MICOM/switching circuit 250 in figure 5.

Per claim 13:

A) Kim et al teach the following claimed items:

1. receiving a predetermined signal from a computer indicating whether the computer is powered on or off with the signal output from 1st Power Supply 120 and received by the MICOM microcomputer in figure 4 and at column 8, lines 39-44 and 51-54;
2. selectively powering the monitor on and off according to the predetermined signal with figure 4, at column 8, lines 23-44 and 51-54 and at column 10, lines 53-65;
3. transmitting the predetermined signal to the monitor whether the monitor is powered on or off at column 8, lines 39-44 and 51-54 and at column 10, lines 53-65. The computer supplies a powered on signal level when the computer is powered on and supplies a powered off signal level when the computer is powered off. In addition, the predetermined signal allows for powering the monitor off in a power save mode while maintaining power to the MICOM microcomputer via the predetermined signal.

B) The claims differ from Kim et al in that Kim et al fails to explicitly teach supplying power from the predetermined signal to a memory storing monitor information so that the monitor information is accessible by the computer if the monitor is powered off as claimed.

C) However, Kim describes providing a 5 volt power signal from the computer to the MICOM and switching circuit 250 with figures 4 and 5. Kim discloses supplying the 5 volt predetermined signal to the MICOM microcomputer when the monitor is powered off at column 10, lines 53-65. Therefore, Kim discloses providing a separate power source to the switching circuit components in the monitor making the switching circuit power independent of the monitor power supply. Chaiken teaches that it is known to provide a monitor with a memory storing monitor information and that it is conventional for the BIOS to read/download the monitor information in a monitors ROM during initialization with figure 2 and at column 1, lines 45-59. In addition, Kim acknowledges that monitors consume an undue amount of power and acknowledges that it is known to include display power management systems (DPMS) in monitors at column 1, lines 45-55 and column 7, lines 7-16. Kim further discloses improving the conventional DPMS by combining a DPMS with the MICOM and switching circuit 250 of figures 4 and 5 in order to further reduce overall power consumption of the monitor to below 1 watt at column 10, lines 53-65. This effectively makes the MICOM microcomputer part of the DPMS. As described above, Kim maintains the 5 volt power to MICOM microcomputer while the monitor is powered off

thereby further reducing the power consumption of the monitor when in the power save mode because only the MICOM switching circuit remains powered. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a monitor with a memory storing monitor information, as taught by Chaiken, in order to provide the computer and BIOS with monitor information for initializing and configuring the computer. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the memory with the MICOM switching circuit components and power the memory from the 5 volt power signal of Kim in order to provide power to the memory whether the monitor is powered on or off because this would allow the monitor to remain off during computer initialization and configuration thereby reducing the power consumed by the monitor. Furthermore, it is well known in the art that microcomputers such as MICOM in display 200 typically include read only memory and it would have been obvious to one of ordinary skill in the art to use the MICOMs ROM for storing Chaiken's EDID file. It would have been obvious for one of ordinary skill in the art to combine Kim and Chaiken because of Chaiken's description that it is well known that monitors include a ROM for storing EDID files having monitor information and that it is conventional for the BIOS to read/download the EDID file in a monitors ROM during initialization at column 1, lines 45-59. Therefore, Chaiken discloses that one of ordinary skill in the art would have known that monitors include a ROM for storing EDID files having monitor information and that it is

conventional for the BIOS to read/download the EDID file in a monitors ROM during initialization. It would have been obvious for one of ordinary skill in the art to locate/store the EDID file in the ROM of the monitors MICOM microcomputer in order to take advantage of the microcomputers independent power source and display power management functionality.

Per claim 15:

Kim describes transmitting the predetermined signal to the monitor via a serial cable with the serial cable running from 1st Power Supply 120 to MICOM in figure 4. Kim describes detecting the level of the predetermined signal, supplying power to the monitor when the level is higher than a reference level and cutting off power when the level is lower than the reference level with the threshold voltage level of switching transistor Q1 of figure 4 and at column 8, line 58 – column 9, line 16. Kim describes powering off the monitor when the predetermined signal is not received due to the computer being in a DPMS mode or a power off mode at column 8, lines 51-54, at column 9, lines 8-16 and at column 10, lines 47-65.

7. Applicant's arguments filed on October 16, 2007 have been fully considered but they are not persuasive.

In the Remarks, applicant has argued in substance that:

- A. Kim et al does not appear to set forth any further capabilities or requirements for MICOM other than controlling the on/off control signals.

- B. There is no particular reason in the record to move any placement of any memory of the monitor of Kim to the MICOM, or to place a copy of such information in an additional memory within the MICOM of Kim.
- C. Kim emphasizes that power should be reduced upon inaction or non-activity, and power should be returned upon a return to action or activity. Thus, there would not appear to be a need to have the monitor off while initializing, at least based upon the disclosure of Kim.
- D. There appears to be a recent drive to increase the initializing process of computers so they boot up quicker and quicker, and with there being some required start-up time for monitors, it would not appear intuitive to keep the monitor off while trying to speed up the on-screen display to a user.
- E. Operating systems typically provide a substantial amount of information to a user during the initialization process, to let the user know what process of the initialization are being performed.
- F. Applicant's request the examiner to provide a reference supporting the position that it is well known that microcontrollers like the MICOM of Kim to have ROM memories.
- G. The addition of the memory will increase costs, increase power usage and increase complexity. All off these factors would appear to teach away from the proposed belief presented by the examiner that it would have been obvious to add such a memory.

H. There is no evidence in the record to place that memory with the MICOM being used to control on/off power supply for the remainder of the monitor.

8. As to point A, the examiner disagrees with applicant's contentions. Kim discloses improving the conventional DPMS (display power management system) by combining a DPMS with the MICOM and switching circuit 250 of figures 4 and 5 in order to further reduce overall power consumption of the monitor to below 1 watt at column 10, lines 53-65. This effectively makes the MICOM microcomputer part of the DPMS. Kim discloses that MICOM controls the on/off signals in response to turning the computer on, turning the computer off and power save mode signals. MICOM has capabilities beyond merely controlling the on/off signals as the MICOM controls these signals in response to receiving a diverse set of control signals.

As to point B, the examiner disagrees with applicant's contentions. Applicant's first point is unclear. The examiner requests clarification as to moving any placement of any memory of the monitor because Kim appears to be silent as to whether the monitor has a memory. Applicant is requested to particularly point out what memory in the monitor is purportedly being moved. As to there Allegedly being no particular reason in the record to place a copy of Chaiken's monitor information in the ROM of the MICOM of Kim, the examiner disagrees with applicant's contentions. The examiner provided reasons for placing a copy of Chaiken's monitor information in the ROM of the MICOM of Kim in both the above detailed office action and the final rejection of June 25, 2007. Chaiken teaches that it is known to provide a monitor with a memory storing monitor information and that it is conventional for the BIOS to read/download the monitor

information in a monitors ROM during initialization with figure 2 and at column 1, lines 45-59. Therefore, there is clear reason for placing the monitor information in a memory in the monitor as it is well known and conventional to do so in order to provide the computer and BIOS with monitor information for initializing and configuring the computer. Kim acknowledges that monitors consume an undue amount of power and acknowledges that it is known to include display power management systems (DPMS) in monitors at column 1, lines 45-55 and column 7, lines 7-16. Kim further discloses improving the conventional DPMS by combining a DPMS with the MICOM and switching circuit 250 of figures 4 and 5 in order to further reduce overall power consumption of the monitor to below 1 watt at column 10, lines 53-65. This effectively makes the MICOM microcomputer part of the DPMS. One of ordinary skill in the art would have reason to locate/store Chaiken's EDID file in the ROM of the monitors MICOM microcomputer in order to take advantage of the microcomputers independent power source and display power management functionality. One of ordinary skill in the art would have understood that placing the monitor information file in the MICOM ROM could allow the monitor to remain off during computer initialization and configuration thereby reducing the power consumed by the monitor. One of ordinary skill in the art would have been motivated to reduce power consumption during computer initialization based on Kim's disclosure that monitors consume an undue amount of power and that it is known to include display power management systems (DPMS) in monitors to reduce their power consumption at column 1, lines 45-55 and column 7, lines 7-16. Kim discloses improving a conventional MICOM by providing display power management

functionality in the MICOM. It is within the skill of one of ordinary skill in the art to use this improved power control functionality during computer initialization because the computer can not be operated by a user until after it has been initialized. One of ordinary skill in the art would have been motivated to place the monitor information file in the MICOM ROM because it is available, is already being powered, has an independent power source and has power management functionality. Therefore, the only additional resource required would be the small 128 bytes of memory space (col. 6, line 1-3) needed to store the file of figure 2 of Chaiken in the ROM of Kim's MICOM. Therefore, based on the above reasoning, the teachings and inferences of Kim and Chaiken and the creative steps that one of ordinary skill in the art would employ, there is clear reason in the record to place a copy of Chaiken's monitor information in the ROM of the MICOM of Kim.

Regarding point C, applicant's contention of what Kim teaches is not backed by any evidence. Applicant is requested to particularly point out where Kim teaches emphasizes that power should be reduced upon inaction or non-activity, and power should be returned upon a return to action or activity. The examiner best understands applicant's contention as being directed to inaction, non-activity and activity of the user. One of ordinary skill in the art would have been motivated to reduce power consumption during computer initialization based on Kim's disclosure that monitors consume an undue amount of power and that it is known to include display power management systems (DPMS) in monitors to reduce their power consumption at column 1, lines 45-55 and column 7, lines 7-16. Kim discloses improving a conventional

MICOM by providing display power management functionality in the MICOM. It is within the skill of one of ordinary skill in the art to use this improved power control functionality during computer initialization because the computer can not be operated by a user until after it has been initialized and the monitor is not needed during initialization. Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. However, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ (*KSR v. Teleflex*).

As to point D, Kim teaches away from applicant's assertion by disclosing that monitors consume an undue amount of power and that it is known to include display power management systems (DPMS) in monitors to reduce their power consumption. One of ordinary skill in the art would have been motivated to reduce power consumption during computer initialization based on Kim's disclosure that monitors consume an undue amount of power and that it is known to include display power management systems (DPMS) in monitors to reduce their power consumption at column 1, lines 45-55 and column 7, lines 7-16. Kim discloses improving a conventional MICOM by providing display power management functionality in the MICOM. It is within the skill of one of ordinary skill in the art to use this improved power control functionality during computer initialization because the computer can not be operated by a user until after it has been initialized and the monitor is not needed during initialization. In

addition, there is always a tradeoff between performance (speed) and reducing power consumption. It is a matter of design choice as to whether to have increased performance (speed) at the cost of increasing power consumption or whether to reduce power consumption at the cost of reducing performance.

As to point E, manufacturers typically display a splash screen with their logo during initialization. The initialization information is rarely displayed during initialization and this information is available in the computer such as with the "my computer" icon. In addition, beep codes can be used to notify users of problems that occur during initialization of the computer. Therefore, the monitor is not required during initialization other than to display the manufacturers logo.

As to point F, the examiner provided two references supporting this position in the previous final rejection. See paragraph 9 of the final rejection mailed on June 25, 2007.

As to point G, the examiner disagrees with applicant's contentions. Locating the monitor information in the ROM of the MICOM will not increase costs, will not increase power usage and will not increase complexity. One of ordinary skill in the art would have been motivated to place the monitor information file in the MICOM ROM because it is available, is already being powered, has an independent power source and has power management functionality. Therefore, the only additional resource required would be the small 128 bytes of memory space (col. 6, line 1-3) needed to store the file of figure 2 of Chaiken in the Rom of Kim's MICOM.

As to point H, the examiner disagrees with applicant's contentions. Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. However, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ (KSR v. Teleflex). The examiner has provided articulated reasoning and rational to support the obviousness determination. The question is not whether the combination was obvious to the patentee but whether the combination was obvious to a person with ordinary skill in the art. Common sense teaches that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle (KSR v. Teleflex). One of ordinary skill in the art would have been motivated to place the monitor information file in the MICOM ROM because it is available, it is located in the monitor, it is already being powered, it has an independent power source and it has power management functionality. The only additional resource required to locate the monitor information in the MICOM ROM would be the small 128 bytes of memory space (col. 6, line 1-3) needed to store the file of figure 2 of Chaiken in the Rom of Kim's MICOM.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis M. Butler whose telephone number is 571-272-3663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dennis M. Butler

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Art Unit 2115